

MIAMI-DADE COUNTY
OFFICE OF PERFORMANCE IMPROVEMENT

PUBLIC WORKS DEPARTMENT (PWD)

Construction Contract Payment Process Review

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EXECUTIVE SUMMARY

The Public Works Department (PWD) requested the Office of Performance Improvement (OPI) review its construction payment processes and make recommendations to reduce processing times. Historically, payments due to contractors were made pursuant to Administrative Orders 3-19 and 3-22. Administrative Order 3-19 stipulates that County vendors receive payment within 45 calendar days of receipt of an approved invoice. This payment period includes both the time the department requires to process and approve payments and the time required by the Finance Department (Finance) to make a final payment to the contractor. Subsequently, the County established Administrative Order 3-22 requiring that Community Small Business Enterprise (CSBE) construction contractors receive payments within 14 calendar days of receipt of an approved invoice. However, on October 19, 2001, the County Manager issued a memorandum directing departments to process and forward payment requisitions for CSBE contractors to Finance within seven working days. Consequently, PWD requested OPI work with the Department to find ways to meet the 7-day processing time stipulated by the County Manager.

OPI met with PWD staff, conducted interviews, observed work processes, developed detailed process flows, analyzed payment logs and evaluated payment processing times for 103 payment requisitions between September 2001 and July 2002. It should be noted that while the County Manager stipulates that CSBE firms be paid more promptly, PWD aims to permanently reduce payment processing times for all firms. Consequently, no separate assessment was completed for CSBE firms.

OPI found that on average, PWD meets and exceeds the processing time stipulated in Administrative Order 3-19 but fails to consistently meet the 14-day deadline stipulated in Administrative Order 3-22 and the seven business days established by the County Manager. Based on the data analyzed, PWD processes payment requisitions within an average of 11.15 to 14.45 calendar days from receipt of an approved invoice. Assuming the Finance Department requires a maximum of seven calendar days to process a final payment, contractors will typically receive payment checks within a maximum of 18.15 to 21.45 calendar days.

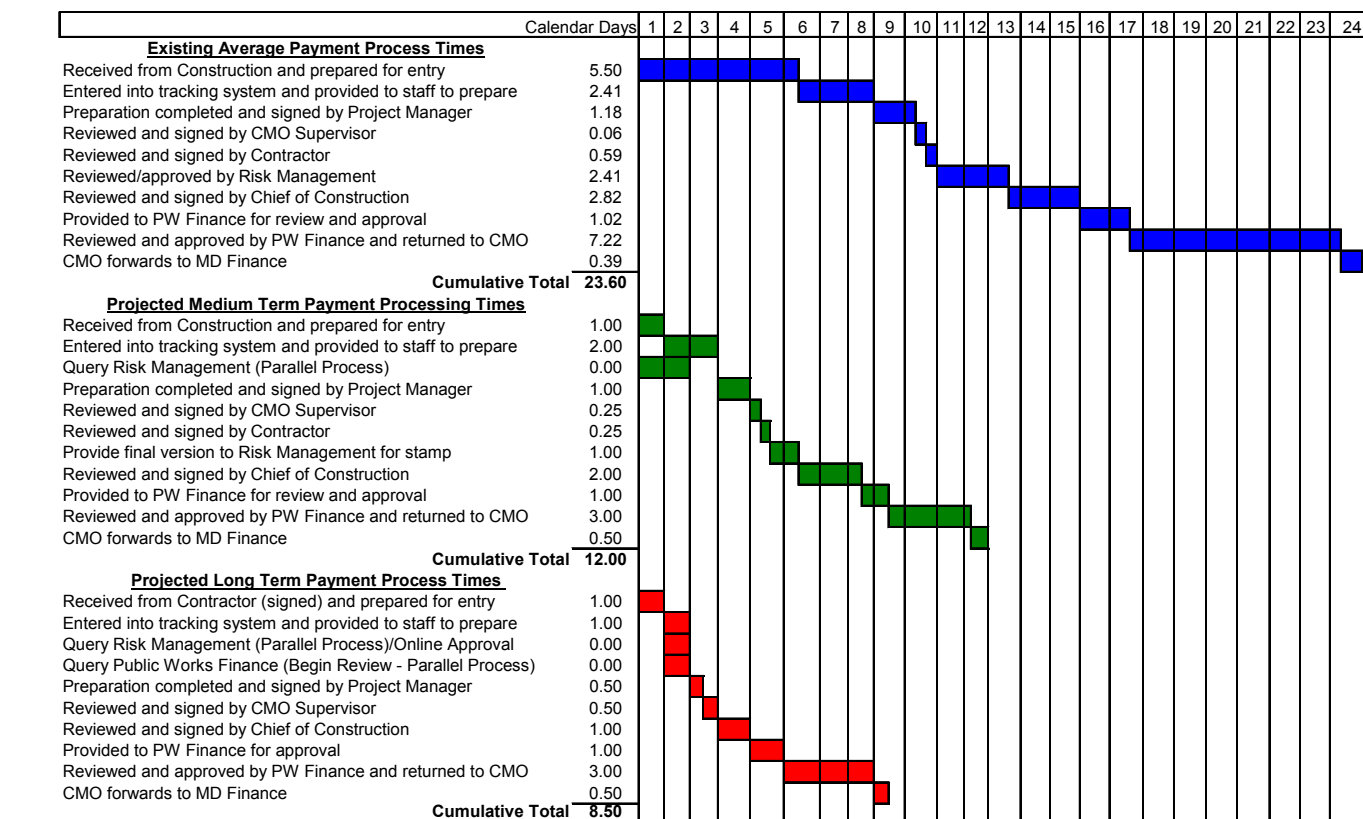
Payments are delayed typically due to the inordinate amount of rework, the excessive duplication of efforts and the need for process flow improvements. Additionally, payment requisitions are sometimes submitted with incomplete and inaccurate documentation. The Department also needs to improve and make better use of the computerized construction management software it developed, strengthen contract language, develop standard operating procedures and improve inter-divisional communications.

OPI estimates that with process and organizational improvements, PWD can consistently process payment requisitions within an average of 12 calendar days in the short to medium term and approximately 9 calendar days (seven business days) over the long term. Detailed recommendations are presented in Appendix I. Figure 1 summarizes the major recommendations for reducing payment process review times.

Construction Payment Process Review

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Figure 1
Public Works Department
Existing and Projected Payment Processing Times



Payment Process Logistics

The Construction Division currently takes responsibility for preparing payment estimates on behalf of contractors, a process which takes approximately nine days. Additionally, the Contract Monitoring Office (CMO) prepares the final invoice, trouble shoots issues and obtains contractor signatures and other activities that should normally be performed by the Construction Division. Once signatures are obtained, the remaining review activities (finance review, insurance verification etc.) are largely conducted sequentially.

OPI recommends that the PWD place the onus on contractors to prepare and submit completed and signed invoices including all required support documentation. This relieves the County of this responsibility and frees construction management resources for improved project management. Additionally, upon receipt of the completed/signed invoice package from the Construction Division, the CMO should request insurance verification and finance review simultaneously while processing payment documentation. Simultaneous processing alone could reduce processing times by as many as seven days.

On creating the CMO to perform independent payment oversight, the Department shifted resources from the Construction Division to staff the CMO. However, work processes and responsibilities were never changed to reflect the new organizational structure. Consequently,

the Construction Division continues to depend on CMO to perform work that it should complete within the division. This creates problems of roll overload in the CMO and also compromises CMO's ability to conduct independent oversight. OPI recommends a realignment of responsibilities to streamline invoice payment and oversight.

Process Efficiency Improvements

The CMO spends considerable time on rework activities and a single requisition requires in excess of 27 touch points (hand-offs) during processing. Also, staff enters payment information in both Excel and manual logs. Late in the payment review process, PWD Finance Division reenters invoicing data into a separate database, reviews the invoice (sometimes duplicating work already completed by the CMO) and sends the requisition back to the CMO for further processing.

PWD should utilize the computerized Contract Specification Construction Coordination (CSCC) system as the hub of the review process for all divisions. The Department should also require staff to use the application for calculations, contract monitoring, information logging and tracking, reporting and for change order tracking. This could reduce processing times by three to four days, eliminate duplication (recalculation using Excel spreadsheets and adding machine tapes and data logging using manual and Excel logs) and allow for simultaneous payment reviews. To achieve these gains, PWD needs to aggressively expand the CSCC system to include all the functions of PWD Finance, Contracts and Specifications, CMO and the Construction Division.

Signature Requirements

Invoices generally require nine to 11 signatures. OPI recommends reducing this number to five and in lieu of the additional signatures; develop simple management reports using the CSCC system.

CSCC System Tools

While the CSCC system is operational, it lacks critical functionality that users require for day-to-day payment processing and tracking. OPI recommends enhancing the system with input from all users, providing intensive and comprehensive user training and developing standard written operating procedures. Once enhancements are substantially complete, PWD should establish a formal changeover date when all manual, Excel and other tools must be discontinued. PWD should also work with other County departments for long term enhancements such as on-line approvals, links to the Finance Department, online invoicing and handheld devices for construction managers.

Contract Language

Contracts are typically developed using old "boilerplate" language that has not been updated to address new and changing contract situations. Contract language in many cases does not clearly specify remedies for non-compliance or in some cases does not address issues that PWD currently faces. OPI recommends a review of old "boilerplate" and a strengthening of contract language to facilitate improvements in enforcement options.

Inter-divisional Communication

Positive and proactive inter-divisional communications in the PWD need to be improved. OPI recommends conducting at least quarterly contract and payment performance review meetings

with division chiefs to highlight areas for improvement and to evaluate performance against the County Manager's payment targets. OPI also encourages PWD to allow contract preparation and engineering design staff to conduct site visits before, during and after construction, such that new experiences and lessons learned can be incorporated into the contracting processes.

BACKGROUND

The Public Works Department (PWD) is responsible for planning, scheduling and directing infrastructure construction projects and improving roadways, sidewalks, and rights-of-way in Miami-Dade County. PWD prepares construction contracts, provides engineering and project management oversight and processes progress payments.

Payments due to construction contractors are made pursuant to Administrative Orders 3-19 and 3-22. Administrative Order 3-19 stipulates that County departments must make payments to vendors within 45 calendar days of receipt of the approved invoice. This payment period includes the time required by departments to process and approve payments and the time required by the Finance Department (Finance) to make payment to the contractor.

In an effort to support the CSBE Program, the County passed Ordinance 97-52 providing opportunity for small businesses to participate in County construction contracting. Subsequently, the County established Administrative Order 3-22 requiring that County departments pay CSBE construction contractors within 14 calendar days of receiving an approved invoice. However, on October 19, 2001, the County Manager issued a memorandum directing departments to process and forward payment requisitions for CSBE contractors to Finance within seven working days.

PWD requested that the Office of Performance Improvement (OPI) work with the Department to review its payment process and to make recommendations for reducing processing times.

PROJECT SCOPE

OPI focused primarily on activities that directly impact the construction contract payment review and approval process. OPI held several meetings and conducted interviews with staff from the Contract Monitoring Office (CMO), the Contracts and Specifications Division, the Construction Division, the Public Works Finance Division (PWD Finance), and the PWD Management Information Systems (MIS) Division. Given that the CMO plays a central role in the payment process, OPI conducted several site visits to observe CMO's work processes, particularly processes related to review, error correction, data validation, insurance verification and change orders. Meetings with the MIS Division focused on the computerized Contract Specification Construction Coordination (CSCC) system, its development, real and perceived uses and its functionality. OPI also reviewed payment logs, developed detailed flow charts and analyzed processing times for 103 payment requisitions between September 2001 and July 2002.

It should be noted that while the County Manager's directive and Administrative Order 3-22 provide that CSBE firms be paid more promptly, PWD desires to reduce payment times for all firms and consequently did not require a separate assessment for CSBE firms.

CONTRACT PAYMENT PROCESS

Once the Board of County Commissioners approves a construction project or work program, the Contracts and Specifications Division prepares the contract, detailed specifications and the bid items required for the contract. The Contracts and Specifications Division enters bid items into the CSCC database developed by the Department's MIS Division for in-house contract

monitoring and advertises for invitations to bid from interested contractors. Responses from all bidders are entered into the CSCC system and following bid tabulation and award, the winning bidder is coded as the Contractor of Record for the particular contract in the CSCC database. While all bids are contained in the database, the program ensures that payments can only be made to the winning bidder. The Construction Division subsequently assigns a construction manager who takes responsible for issuing work orders against the contract, performing contract oversight, monitoring work progress, resolving issues, managing the project and preparing and approving payment requisitions. The following is a brief summary of payment process.

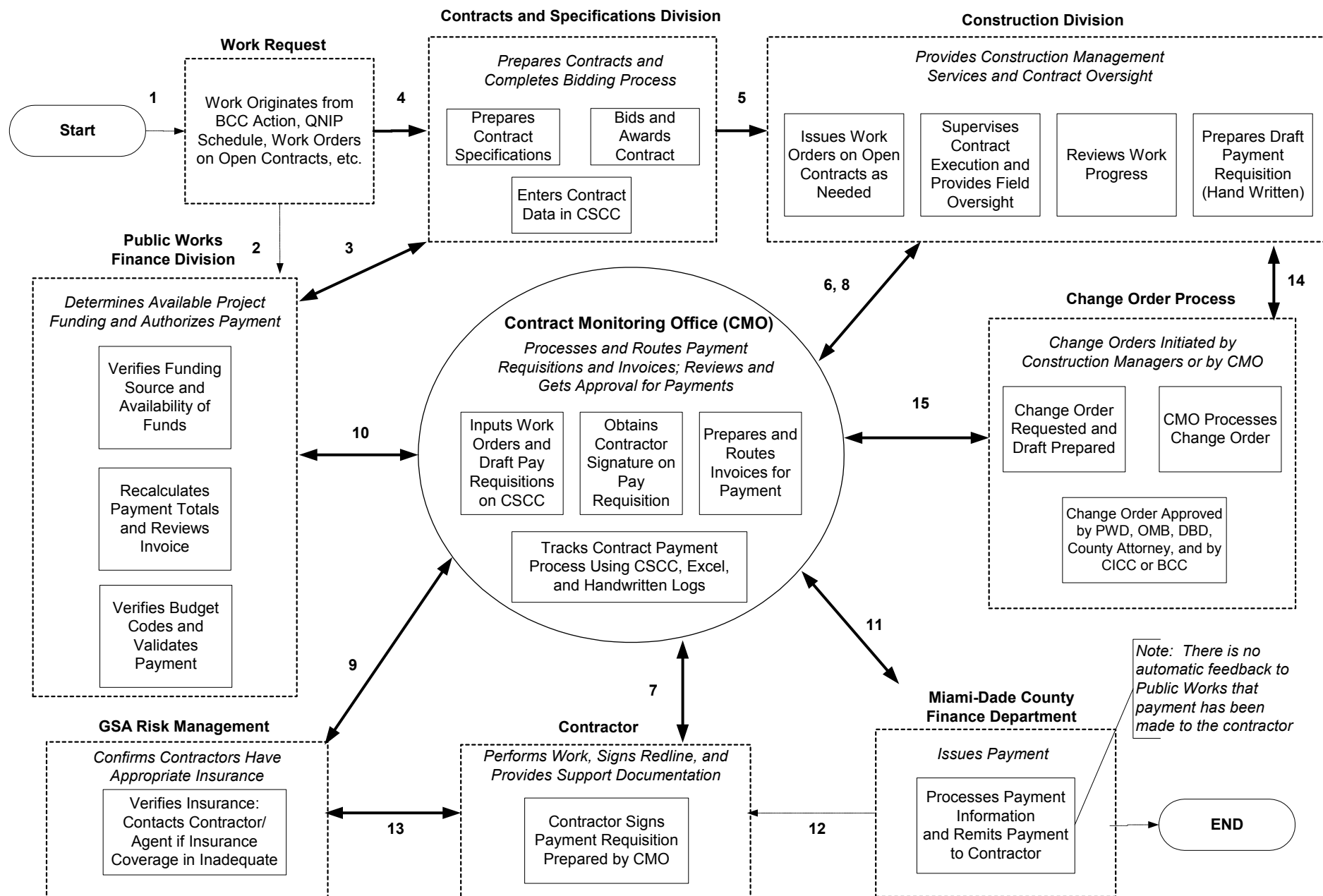
As progress payments become due, Figure 2, the PWD construction manager prepares a draft estimate of the quantities relevant to the payment period (generally using a blank payment requisition form printed from the CSCC system and provided by the CMO). The construction manager meets with the contractor to discuss quantities completed relative to the bid items, including labor and materials used during the billing period. The contractor and construction manager review the draft payment estimate, make adjustments, and create a mutually agreed upon 'redline' estimate for the payment period. After both parties sign/initial the redline, the construction manager prepares and submit a handwritten draft requisition to the CMO for processing.

The CMO reviews the redline estimate and supporting documentation, resolves issues both with the contractor and construction managers (verbally and in writing) and enters the data from the estimate into the CSCC system. Additionally, the CMO verifies that payment calculations are correct and that the payment will not result in cost overruns. Should overruns become eminent, the CMO alerts the appropriate parties and performs follow-up activities to ensure the situation is rectified. Solutions typically include initiating change orders or securing other funding sources. The CMO also makes efforts to obtain supporting documentation not provided by the construction manager or the contractor in addition to tracking contract and contingency balances. The CMO prints the final requisition from the CSCC system and obtains signatures from the contractor and construction manager. At this point the payment requisition is considered to be an approved invoice. CMO then requests insurance verification from General Services Administration's Risk Management Division, secures any remaining approvals and forwards the signed requisition to the PWD Finance division for review.

PWD Finance manually reenters project and payment data into a separate database and subsequently reviews the payment calculations, budgets, funding, confirms budget codes and reviews selected support documentation. On approval by PWD Finance, CMO retrieves the payment requisition, obtains the remaining approvals and forwards the request to the County's Finance Department for payment. If the progress payment is either the first or last for the contract, the Assistant Director of Construction and the PWD Director may also sign the requisition before it is forwarded to the Finance Department.

The CMO is also responsible for preparing change orders. Change orders are normally required when time extensions or increased funding is required for a contract. Typically, the construction manager submits a draft request and the CMO researches the issues, resolves discrepancies and prepares the change order justification language and cover memo. The CMO then processes the change through the Office of Management and Budget (OMB), the County Attorney and the Department of Business Development (DBD). After obtaining the necessary approvals, the change order is released. Change order tracking is done using a Microsoft Excel spreadsheet.

Figure 2
Miami-Dade County
Public Works Department
Functional Summary - Current Payment Process



FINDINGS

While the CMO was initially established to provide independent oversight for payment requisitions, maintain the integrity of the payment process and manage change orders, the division spends a significant portion of time resolving contract issues, reworking payment drafts, performing clerical and administrative work for the Construction Division, securing insurance verification, performing follow-up activities and correcting invoicing errors. CMO staff was established using some administrative staff previously assigned to the Construction Division. However, since the reorganization, work processes in the Construction Division were never realigned consequently, the Division continues to rely on the CMO for some contract administrative support.

A large portion of the rework stems from deficiencies and errors in payment requisition submissions, a lack of supporting data and incomplete or illegible construction field logs and an underutilized contract management application program. OPI reviewed the CMO payment logs (manual logs and Excel spreadsheets) to establish processing times for 103 payment requisitions between September 2001 and July 2002. The first 51 payment requisitions (Set 1) cover the period September 2001 to February 2002 and the remaining 52 requisitions (Set 2) cover the period March 2002 to July 2002. A total of 26 of the requisitions in Set 2 were excluded from the analysis because of insufficient data. Consistent with PWD's interpretation of Administrative Orders 3-19 and 3-22, OPI computed processing times from the date the CMO secured the contractor's signature (an approved invoice) to the date the invoice was sent to Finance for payment. Processing times were computed in both business and calendar days. Additionally, in order to better simulate the perceived elapsed time as seen by contractors, OPI also computed processing times from the date CMO received draft payment requisitions from the Construction Division to the date the payment request was sent to the Finance Department for payment.

Table 1 summarizes the results and indicates that the PWD processes payment requisitions between an average of 11.15 calendar days (approximately eight business days) and 14.45 calendar days (approximately 10 business days) from receipt of the approved invoice. Assuming the Finance Department requires a maximum of seven calendar days to process a final payment, contractors will typically receive payment checks within 18.15 to 21.45 calendar days of the date of the approved requisition. In practice, actual payments to contractors are made several days earlier because the Finance Department typically makes payments in less than seven days.

Average payment processing times meet and exceed the 45-day target set by Administrative Order 3-19 but do not meet the 14-day target stipulated in Administrative Order 3-22 for CSBE firms or the County Manger's directive to forward payments to Finance within seven business days. Figure 3 shows average processing times at various stages of the payment review process as recorded in the payment logs. While there seems to be improvement in the processing times since September of 2001, the following are noteworthy:

1. Preparation of the requisition for the contractor's final signature is time-consuming. In addition to entering redline data into the CSCC system, CMO has to perform a significant amount of rework to correct deficiencies and errors in the draft requisition package. On

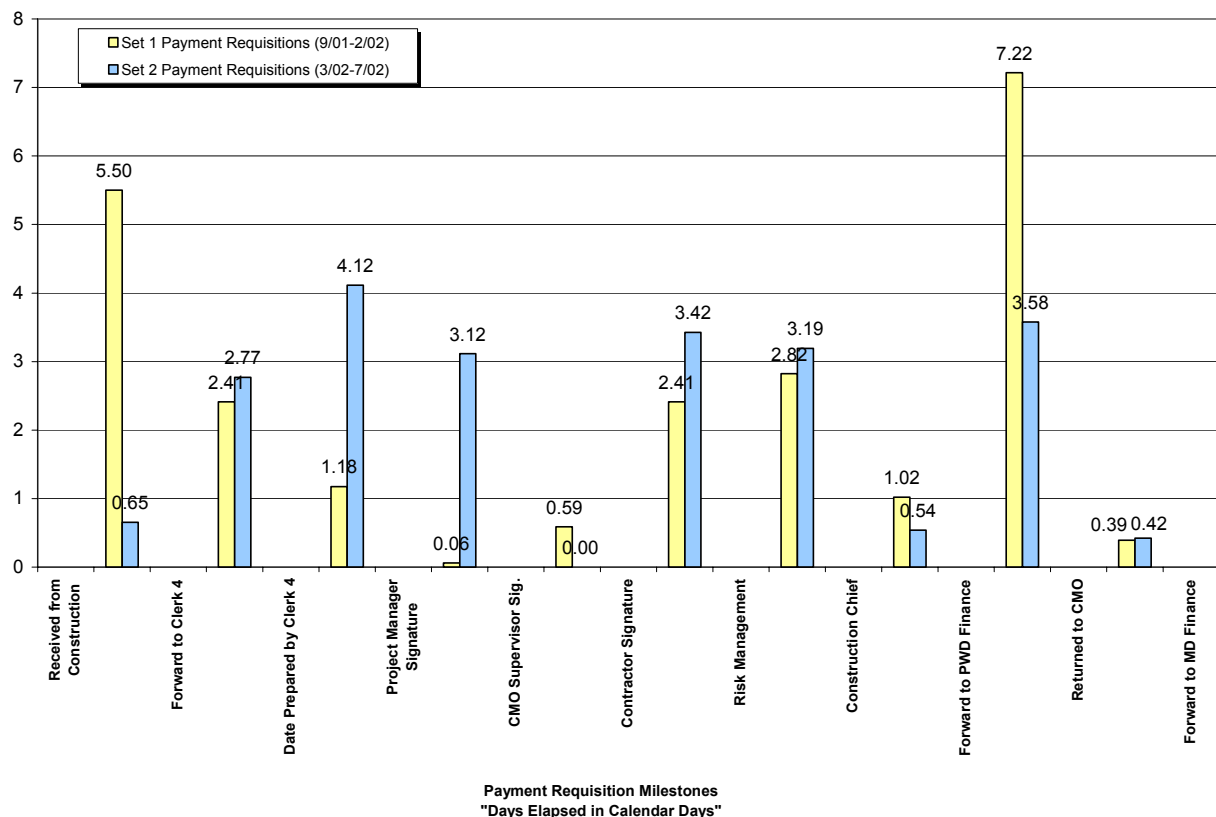
Table 1
Public Works Department
Average Payment Requisition Processing Times

Requisitions	Calendar Days		Business Days	
	From the Date Contractor Signs Requisition (Approved Invoice)	From Receipt of Draft from Construction Division	From the Date Contractor Signs Requisition (Approved Invoice)	From Receipt of Draft from Construction Division
Set 1 (51 Requisitions for Sep 01 to Feb 02)	14.45	23.60	10.47	16.65
Set 2 (26 Requisitions for March 02 to July 02)	11.15	17.92	8.27	13.27

NOTES: Processing times from receipt of the draft requisition from the Construction Division range from a low of 7 calendar days to a high of 50 calendar days.

Historically, the Finance Department requires seven calendar days to process a final payment received from departments. However, the Finance Department can make payments in less than seven calendar days.

Figure 3
Public Works Department
Contract Monitoring Office
Average Payment Requisition Processing Times in Calendar Days
September 2001 to July 2002



average, for the two sets of data analyzed, this required 9.15 and 10.66 calendar days respectively.

2. Based on changes made by the CMO, the elapsed time between CMO's receipt of the draft requisition from Construction and the time the Clerk 4 receives the requisition was reduced from an average of 5.5 calendar days to less than one day. However, this gain is completely offset by an average increase of six days in the time required to resolve issues and obtain signatures from the construction manager and the CMO Supervisor.
3. The CMO requests verification of contractor insurance from GSA Risk Management late in the review process and this typically requires three days. The CMO could eliminate this delay by requesting insurance verification as soon it receives the payment requisition form Construction, effectively creating a parallel activity.
4. The average processing time in the PWD Finance division fell from 7.22 to 3.58 calendar days and constitutes the majority of the reduction in total payment processing time.

It is important to recognize that a contractor may consider the "payment clock" to start once he/she agreed to the 'redline'. PWD's interpretation however, is that the payment clock starts once the contractor signs the invoice prepared by the CMO. Due to the fact that the County takes responsibility for preparing the invoice on behalf of the contractor, the County is responsible for any additional delay in invoice preparation. In order to provide a more comprehensive estimate of actual processing times, OPI attempted to determine the time elapsed between the date the contractor agreed to the redline and the date construction managers submitted the estimate to CMO for processing. OPI received data for 40 of the 77 useable payment requisitions from the Construction Division. The data indicates that construction managers took an average 9.15 calendar days to submit the draft payment requisitions to CMO. When added to the processing times from Table 1, requisitions could be sent to the Finance Department up to 30 days after the contractor agrees to the redline.

Information obtained during staff interviews indicates that the current approach to project management and contractor behavior may be major contributors to payment problems. Several issues that were apparent include:

- Payment requisitions submitted without all the required supporting documents
- Mathematical errors in line item calculations
- Incorrect timesheets or timesheets that do not match the invoicing period
- Incorrect contract information listed on payment requisition
- Administrative and clerical aspects of project management were not adequately performed consequently, the CMO performs these unfinished tasks
- Some contractors allow insurance contracts to expire while the project is still ongoing
- Weak contract language limits enforcement capabilities
- The engineering design and contract and specification staff need to perform more field visits to benefit from new experiences and need to incorporate lessons learnt into future contracts

The impacts of these issues are apparent in the work processes (Chart 1). There are on average 27 to 30 touch-points during the payment review process from the date the contractor agrees to the 'redline' to the date the payment requisition is forwarded to the Finance Department. OPI found excessive duplication across divisions; some sequential activities could be done simultaneously and the CSCC system is underutilized.

RECOMMENDATIONS

OPI estimates that the PWD can consistently process payment requisitions within an average of 12 calendar days in the short to medium term and approximately nine days over the long term. Detailed recommendations for improving the payment approval process and reducing processing times are presented in Appendix I. The following summarizes the major recommendations that could have the greatest impact on the PWD payment process.

Payment Process Logistics

The current payment processes and review practices place the onus on the County to create payment estimates on behalf of contractors, prepare invoices, obtain contractor signature, review all payment data and approve payment. Additionally, while CMO was established to perform independent payment oversight and payment control, the division also prepares, reviews, approves invoices and performs general work order and construction related administrative activities that should normally be performed by the Construction Division.

OPI recommends that the PWD place the onus on contractors to submit signed invoices including all required documentation following the traditional meeting with construction managers. This eliminates the need for construction managers to prepare the payment request (saving an average of 9 days) and frees resources for improved construction management. The following recommended process changes could also reduce processing times by up to six days.

Ideally, the Construction Division should access the CSCC system to enter work orders and contract tracking data, track payment progress and print blank payment forms as needed without reliance on the CMO. If the CMO is to perform independent payment oversight and control, the Construction Division should perform contract administration tasks that are being performed by the CMO on their behalf. For example, prior to forwarding any payment requisition to the CMO, Construction should ensure that the appropriate work orders issued on the contract have been entered into the CSCC system. Additionally, the Construction Division should take steps to improve the quality and accuracy of information submitted to CMO to minimize rework and payment delays. The division should also review contractor invoices, correct errors and request any support not provided by the contractor. Incomplete or inaccurate invoices should be immediately returned to the contractor for corrections prior to approval and prior to sending invoices to the CMO for review.

Once a complete invoice is received from the contractor, the payment clock begins as stipulated by Administrative Order. The Construction Division should immediately sign the document and forward the package to CMO staff for independent oversight and payment processing. On receipt of the payment package, CMO should immediately request insurance verification from GSA Risk Management and enter the data into the CSCC system. Requesting insurance verification early in the process can save an average of two days. Additionally, it is possible to save an

average of three to four days if PWD Finance completes payment verification (funding, budget codes etc.) as a parallel process as soon as the CMO receives the invoice instead of at the end of the process.

OPI recommends that the CMO immediately return incomplete payment packages to Construction for correction. However, in the interest of making payments promptly, the CMO has been retaining these requisitions while making attempts to resolve issues with the contractors and construction managers. While the CMO may find the current process more expedient, OPI recommends creating a module in the CSCC system to track this process in order to measure performance and to allow the PWD to take steps to reduce response times.

Efficiency Improvements

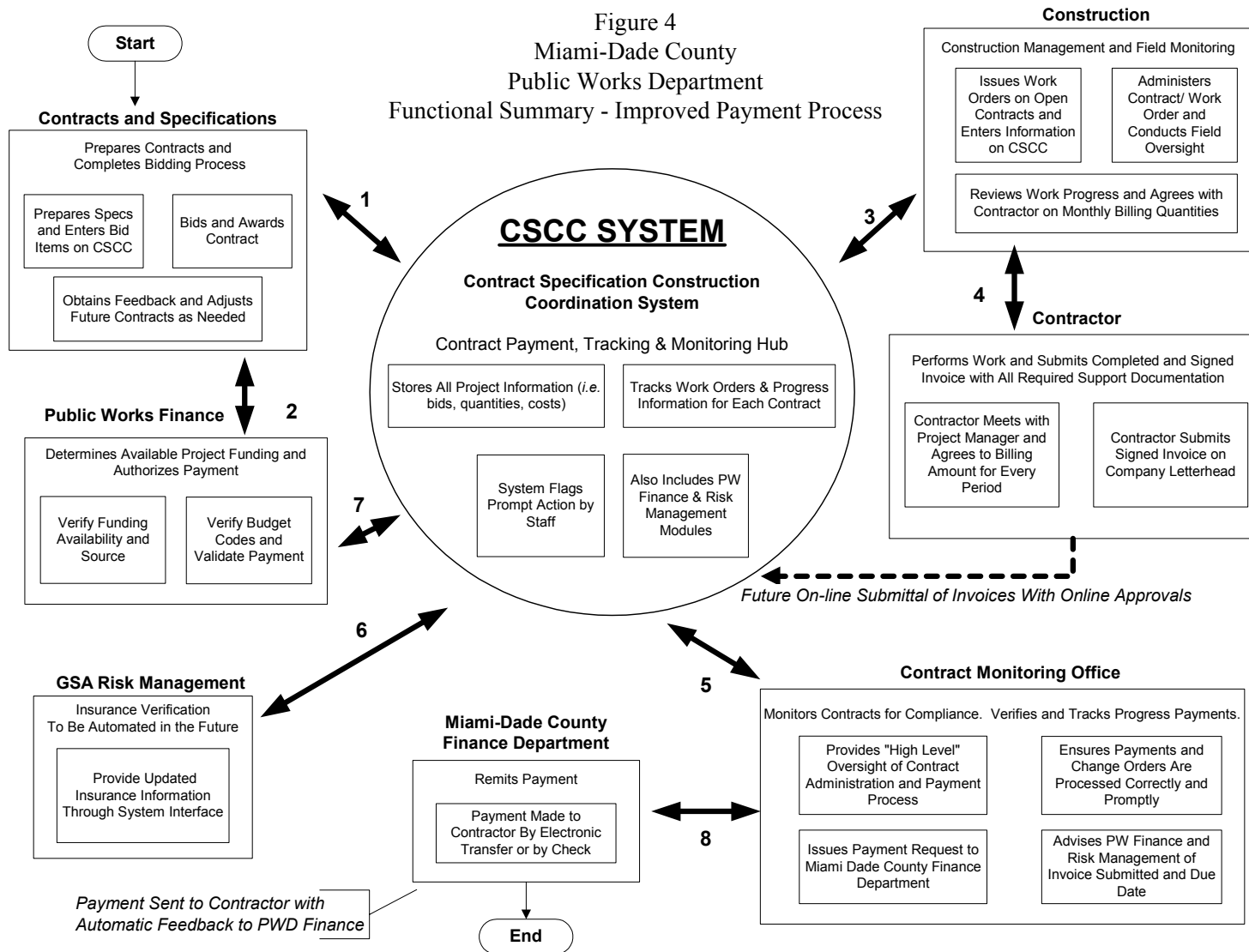
The CMO spends considerable time on rework activities and for logging tracking information in Excel and manual logs. A single requisition currently requires in excess of 27 touch points (hand-offs) during processing. The PWD can implement additional process changes to increase the use of the CSCC application, minimize invoice handling and further reduce processing time to an average of approximately 9 calendar days. This may be achieved by implementing the following recommendations.

The CSCC system should be enhanced and utilized as the hub of the contracting process for all divisions as shown in Figure 4. Functionality should be enhanced to incorporate the processes within PWD Finance, Contracts and Specifications, and the Construction Division. Additionally, functions should be realigned between Construction, the CMO and Finance to eliminate duplication. For example, the practice of PWD Finance reentering CSCC data into their own database should be eliminated and the system should allow both divisions to access files simultaneously. Secondly, PWD Finance should no longer perform some accounts payable functions that have already been performed by the CMO such as recalculating payment totals. Together these process changes could reduce the time required by PWD Finance by as much as 50%.

Using the improved application, the Construction division or the CMO would enter payment data into the CSCC system on receipt of a completed invoice from the contractor. Once the data is entered, the system automatically computes line item totals and total payment amounts. This approach has four advantages and could reduce processing times by three or four days. First it eliminates the need for the CMO to prepare the requisition and obtain contractor and construction manager signatures. Second, it eliminates the need to recalculate totals using Excel spreadsheets or adding machines tapes. Third, it eliminates the need for and the time required to update manual and Excel logs and fourth; it allows the CMO to fulfill its objective of performing independent payment oversight.

The CSCC system currently displays flags when contract budgets or the term is expiring. Standard procedures should be developed to ensure the appropriate staff is alerted and empowered to proactively take action that will minimize future delays. Actions may include immediately initiating change orders, seeking new funding sources or expediting construction activities.

Figure 4
Miami-Dade County
Public Works Department
Functional Summary - Improved Payment Process



Signatures Required for Payment Approval

Payment requisitions generally require nine signatures and up to 11 if the payment represents the first or the last payment on the contract. OPI recommends that PWD review the need for signatures by assessing the meaning of each signature. For example, a contractor signs to attest to the volume of work, payroll, billing period and that payment amounts and other claims are true and accurate while. Construction managers sign to attest to the validity of the contractor's claim. Using this type of analysis, OPI recommends a signature sequence comprising the contractor, construction manager, Clerk 4, and CMO Chief, along with initials or stamps from PWD Finance and GSA Risk Management Division. OPI understands that the Director and Assistant Director sign the first and last payments on each contract primarily as a method of ensuring that they are made aware of new and expiring contracts. In lieu of additional signatures for first and last payments, PWD should develop simple and easily accessible management reports using the CSCC system. These reports should provide managers and the Director with contract monitoring summaries that highlight new contracts being started and those that have been completed.

CSCC System Tools

While the CSCC system is operational, it lacks critical functionality that users require for day-to-day payment processing and contract monitoring. In order to meet their day-to-day needs, users revert to Excel spreadsheets, adding machine tapes and manual logs instead of using the CSCC system. Several users also expressed reservation with using CSCC and consequently use other business tools as a backup.

OPI recommends enhancing the CSCC system for use in all divisions with appropriate input from users, providing intensive and comprehensive user training and developing written procedure for using the application. This requires the PWD to work with users to further determine their needs prior to enhancing the system. A preliminary CSCC functionality and user perception analysis is presented in Appendix II. While this grid does not provide all the details of the payment review process, it serves as a starting point for highlighting the gaps between user perceptions and use of the CSCC system and the actual functionality provided by the program. Expansion of this grid will allow the MIS Division to appropriately incorporate the current functionality of Excel and manual logs that are missing from the CSCC application. These include but are not limited to tracking capability, comments fields, new end user reports, and computing payment times between payment milestones.

Once enhancements are substantially complete, operating procedures and training should be formally developed and instituted. The PWD should also establish a formal changeover date when all manual, Excel and other tools must be discontinued and comprehensive use of the CSCC system made mandatory.

OPI recommends the PWD continue to investigate long-term technology enhancements such as on-line approvals, online payment instructions to the Finance Department, online invoicing and the use of handheld devices for the construction manager for remote access. However, several other County departments, including Water and Sewer and CICC, perform similar contract management functions. Consequently, future CSCC system enhancements should be done in conjunction with other County departments to avoid duplication and minimize costs.

Construction Contract Language

Contracts are typically developed using old “boilerplate” language that has not been updated to address new and changing contract situations. Contract language in many cases does not clearly specify remedies for non-compliance or address issues that the PWD currently faces. OPI recommends a review of old “boilerplate” and a strengthening of contract language to facilitate improvements in enforcement options.

With assistance from all divisions and GSA Risk Management, current deficiencies in contract language should be cataloged, problems and issues identified and new language drafted for County Attorney review. Some issues include: the need for appropriate alternatives when contracts are breached or there is a lack of adequate contractor insurance, the appropriate remedies for these lapses, options for continuing the contract with regard to public safety and contractor liability and options for payment for work completed while the contractor was in breach. Legal review of the new contract language should be obtained, changes incorporated and access to old “boilerplate” language removed from the contracting system. Also, in order to keep contracts up to date as regulations change, a process to educate all staff of changes occurring in county, state and federal regulations, as well as industry standards should be instituted.

Inter-divisional Communication

It was obvious during the review that division staff were not fully aware of how their individual activities impacted other divisions and the payment processes. Improved inter-divisional communication is paramount to solve problems and to effect continuous improvements in construction management. Consequently, the PWD should conduct at least quarterly payment performance process review meetings of division chiefs to highlight areas for improvement and to evaluate performance. Management and key staff should review performance against established targets set by Administrative Orders, the County Manager, the Department and the Board of County Commissioners and take steps to implement change.

OPI also recommends that staff preparing contracts and design documents be required to perform field visits before, during and after construction such that new experiences and lessons learned can be incorporated into the contracting process to effect continuous improvement. Additionally, staff should review change orders and contract addenda to ensure similar problems do not keep occurring in new contracts.

Appendix I
Public Works Department Construction Payment Process Review
Findings and Recommendations

The attached lists the findings and recommendations for improving the construction contract payment review process in the Public Works Department (PWD). Key general findings and recommendations are presented for the operating divisions impacting the process, the change order process and technical issues related to the computerized Contract Specification Construction Coordination (CSCC) system.

Recommended solutions are listed as short, medium and long term. Short-term recommendations can be completed within 90 days, medium term within 180 days while long-term recommendations will require in excess of 180 days for completion.

Appendix I
Public Works Department Construction Payment Process Review
Findings And Recommendations

	Finding	Recommendation	Short Term	Medium Term	Long Term	Assigned To (For PWD use)
1	<p>Analysis of 103 requisitions indicate that on average, payments are made within 45 days as required by Administrative Order (A.O.) 3-19. However, average times are in excess of the 14 calendar days set by A.O. 3-22 for Community Small Business Enterprise firms and seven business days (for PWD processing) set by the County Manager in October 2001.</p> <p>Two sets of payment requisitions were analyzed. Set 1 (51 requisitions) covered the period 09/01– 02/02. Set 2 (52 requisitions) for the period 03/02– 07/02. The analysis shows:</p> <p>a. Average elapsed time (calendar days) to complete processing from the date CMO receives draft requisitions from the Construction Division is 23 days for Set 1 data and 18 days for Set 2.</p> <p>b. Average elapsed time (calendar days) to complete processing from the date CMO receives the contractor's signature on an approved invoice is 14 and 11 days for Sets 1 and 2 respectively.</p> <p>Note: Elapsed time does not include the time required by the Finance Department to make actual payment or the average time it takes the Construction division (9 days) to submit drafts to CMO after meeting with the contractor.</p>	<p>Processing time recommendations are based on the first set of data, Set 1.</p> <p>Reduce invoice payment period from 23 to 9 calendar days (7 business days) from the date the CMO receives draft payment requisitions from the Construction Division by:</p> <ul style="list-style-type: none"> • Requesting insurance verification from GSA Risk Management Division as soon CMO receives payment estimates from Construction without waiting for further processing. (Saves 2 days) • Eliminating process redundancies in Public Works Finance (<i>i.e.</i> recalculating payment amounts), and completing payment verification as a parallel process. (Saves up to 4 days) • Improving the quality of information received from Construction to minimize rework by CMO, and by immediately returning incomplete or incorrect requisitions to Construction instead of holding them at CMO for correction. (Saves up to 5 days) • Placing the onus on contractors to submit final invoices complete with all applicable support, discontinuing the practice of preparing draft invoices for contractors and requiring CMO to prepare requisitions for contractor signature. (Saves 2 days) <p>Further processing time reductions are possible by:</p> <ul style="list-style-type: none"> • Using on-line approvals to reduce the time taken to verify contractors' insurance with GSA Risk Management Division. • Using online approvals in lieu of wet signatures. 	<p>◆</p> <p>◆</p> <p>◆</p> <p>◆</p>	<p>◆</p> <p>◆</p> <p>◆</p> <p>◆</p> <p>◆</p> <p>◆</p>	<p>◆</p> <p>◆</p> <p>◆</p> <p>◆</p> <p>◆</p> <p>◆</p>	

Public Works Department Construction Payment Process Review
Findings and Recommendations (continued)

	Finding	Recommendation	Short Term	Medium Term	Long Term	Assigned To (For PWD use)
2	<p>CMO was established to perform independent oversight of the payment process. However, CMO performs clerical and administrative functions that should normally be performed by the Construction Division largely because its work processes were never realigned after the reorganization of the Department.</p> <p>a. CMO enters payment requisition information directly into the CSCC system, prepares invoices, reviews, approves, and validates its own work instead of performing independent oversight.</p> <p>b. There are significant numbers of errors and inaccuracies or incomplete information on draft payment requisitions submitted to CMO. This requires detailed investigation excessive rework by CMO.</p> <p>c. Construction Division does not effectively use the CSCC system for project management. For example, CMO accesses and prints blank forms for Construction and generally fields questions from contractors with regards to payments.</p>	<p>Realign construction work processes to ensure the Construction Division completes its own administrative work and reduce dependence on CMO, review and submit complete payment packages, and ensure all work orders are entered into the CSCC system:</p> <ul style="list-style-type: none"> • Train construction Managers on administrative aspects of project management and ensure compliance. • Tailor the CMO payment checklist for use by Construction for checking submittals and entering work orders. • Develop and issue written operating guidelines. • Improve field logs, reduce errors and improve the general quality of payment data submitted to CMO to minimize rework and delays. • Train Construction staff to use the CSCC system or future systems to track projects, print blank payment requisitions and track payments etc. without reliance on CMO. • Introduce handheld electronic devices for Construction field use to improve tracking of daily activities and with capability to upload to the CSCC system or other applications as needed. 	<p>◆</p> <p>◆</p> <p>◆</p> <p>◆</p> <p>◆</p>			
3	<p>Excessive duplication:</p> <p>a. PWD staff feels compelled to use Excel spreadsheets and manual logs, and consequently makes limited use of the CSCC system.</p>	<p>Streamline process and improve use of CSCC system tools in all divisions and discontinue use of multiple recording tools (manual and electronic):</p> <ul style="list-style-type: none"> • Incorporate the functionalities of Excel and manual logs and adding machine into the CSCC system (ensure adequate user input). • Include all tracking, comment fields and reporting functionalities required by divisions and work units into the CSCC system. 	<p>◆</p>	<p>◆</p>		

Public Works Department Construction Payment Process Review
Findings and Recommendations (continued)

	Finding	Recommendation	Short Term	Medium Term	Long Term	Assigned To (For PWD use)
	<p>b. Repeated recalculation and rechecking of payment totals at various stages in the payment review process.</p> <p>c. Public Works Finance uses a stand-alone system that is not currently linked to the CSCC system to process payments:</p> <ul style="list-style-type: none"> i. Reenters and recalculates payment amounts already verified by CMO. ii. Rechecks budget codes and funding availability. 	<ul style="list-style-type: none"> Expand the CSCC system to include all PWD Finance, Contracts and Specifications, and Construction Division functionality concerning the contracting process. Realign functions between Construction, CMO and PWD Finance to minimize duplication. Following the above, test functionality with users and set an official changeover date when all manual and excel logs and adding machine tapes should be discontinued. Also, reassure the staff that is uncomfortable with using the CSCC system as the sole project management tool. All future CSCC enhancements and software development should be done in conjunction with other County Departments that are undertaking similar construction management initiatives. These include the Aviation and Water and Sewer Departments and the Office of Capital Improvements Construction Coordination (CICC). Work with Miami-Dade County Finance Department to create automated mechanisms for informing PWD that actual contract payments have been made. Continue working with Finance Department to maximize use of automated methods of submitting approved payment requests. 		<p>◆</p> <p>◆</p> <p>◆</p> <p>◆</p>	<p>◆</p>	
4	<p>PWD prepares invoices for and on behalf of contractor. This practice raises several issues:</p> <ul style="list-style-type: none"> a. May conflict with “arm’s-length” business practices (PWD prepares, reviews and approves requisitions, and reviews and approves payments). b. Contractors may perceive that payments are late or delayed because they may consider the “payment clock” to start when they meet with 	<p>For all new contracts, continue efforts to have contractors prepare and submit a complete and signed invoice to PWD for review and approval. Note however, there are several older contracts that have managed using the existing process.</p> <p>Concerning the new pay requisition process:</p> <ul style="list-style-type: none"> Construction Managers should continue meeting with contractors to discuss billable activities and quantities used, and sign draft payment requisitions. Contractors should use the redline to prepare a signed invoice, attach all required support documentation, and submit payment package to Construction for processing. 	<p>◆</p> <p>◆</p> <p>◆</p>			

Public Works Department Construction Payment Process Review
Findings and Recommendations (continued)

	Finding	Recommendation	Short Term	Medium Term	Long Term	Assigned To (For PWD use)
	<p>the Construction Manager and agree to draft (redline). County policy indicates that the clock starts when PWD receives an “approved and signed invoice”.</p> <p>c. Considerable staff time is spent preparing the payment requisition</p> <p>d. Places onus on PWD as opposed to the contractor for promptness and accuracy.</p>	<ul style="list-style-type: none"> Construction Managers should verify that the data and attached documents are in order, communicate with contractors when requirements are not met, and generally ensure the payment package is complete before approving and forwarding the package to CMO. Offer training to contractors regarding doing business with Public Works, invoice preparation, the payment approval process and other requirements. As technology propagation proceeds, provide electronic interface to CSCC to allow contractors to submit payment requisitions online. 	◆	◆	◆	
5	<p>Nine to 11 signatures are required for payment approval:</p> <p>a. Construction Manager and Construction Coordinator sign the draft payment requisition.</p> <p>b. The following also sign/stamp the final invoice:</p> <ol style="list-style-type: none"> Construction Manager Contractor CMO Clerk IV Risk Management Project Administrator Chief of Construction For 1st payments – CMO Chief and PWD Director For final payments – Asst. Director of Construction and PWD Director PWD Finance Division 	<p>Review the approvals needed:</p> <ul style="list-style-type: none"> Re-evaluate the need for each signature and eliminate signatures where possible. In lieu of in the Assistant Director’s and Director’s signatures, develop simple management reports to provide the following summaries to them: <ul style="list-style-type: none"> New contracts approved First payments indicating contracts that have started All contracts for which final payments are being made during the reporting period Other required management summaries as needed <p>Suggested signatures: Contractor, Construction Manager, Clerk IV, and CMO Chief, along with initials/stamps from PWD Finance and GSA Risk Management.</p> <p>Explore and implement electronic approval methods including final payment instructions to the Finance Department.</p>	◆	◆	◆	
6	The CSCC system needs functional enhancements:	Review CSCC functionalities with inputs from users and review how alternate tools are being used. Enhance CSCC capability to help it drive the contract monitoring process and to answer user queries:				

Public Works Department Construction Payment Process Review
Findings and Recommendations (continued)

	Finding	Recommendation	Short Term	Medium Term	Long Term	Assigned To (For PWD use)
	<p>a. It does not provide some much needed user functionalities for day-to-day processing.</p> <p>b. It does not include PWD Finance applications.</p> <p>c. Though the CSCC application is useful, it is not fully utilized by end users, some of who expressed reservation that it can meet their needs or provide the functionality of their alternate tools (manual logs, adding machines and spreadsheets).</p>	<ul style="list-style-type: none"> Conduct comprehensive needs assessment with all users to determine required functionality. The system functionality grid (Appendix II) provides a convenient starting point. Maintain the CMO's role as the payment process-driver. Develop methods to ensure the flags, prompts, and reminders generated by the CSCC system garners the required action from department personnel. For example, a flag that project time or funds are 80-85% consumed should generate immediate action in Construction if extensions are to needed. Prepare written standard operating procedures and adequately train users department-wide to effectively use the CSCC system. Create and implement a validation testing process for system and new modules/products before implementation. Establish a changeover date when all staff is required to discard alternate tools (old system, excel and manual logs) and to changeover to the CSCC system after the functionalities have been reviewed and enhanced. <p>The CSCC system should also be able to provide:</p> <ul style="list-style-type: none"> Status of payment requisition at any given process stage Number of days spent in each process stage Total time for final payment to be made Associated comments and explanations 	<p>◆</p> <p>◆</p> <p>◆</p>	<p>◆</p> <p>◆</p> <p>◆</p> <p>◆</p>		
7	The Office of Capital Improvement Construction Coordination (CICC) is developing a centralized database for all departments to track capital construction projects.	Public Works and CICC should align their efforts to avoid duplication and minimize costs. New CSCC development initiatives should only be undertaken after cooperative discussions among departments, the CIO and E-Government.	◆	◆		
8	Gaps in understanding of CSCC functionality between CSCC users and system developers. Also users request customized reports from CSCC computer staff.	<p>Conduct a comprehensive needs assessment:</p> <ul style="list-style-type: none"> Catalog processes and needs such that they can be included in the enhanced CSCC application. Develop in-depth training packages and operating manuals. 	◆	◆		

Public Works Department Construction Payment Process Review
Findings and Recommendations (continued)

	Finding	Recommendation	Short Term	Medium Term	Long Term	Assigned To (For PWD use)
	<p>a. Users are not fully aware of the CSCC system's current functionality.</p> <p>b. PWD Computer Division not fully aware of all payment staff's needs and some assumptions regarding desired functionalities may be incorrect.</p>	<ul style="list-style-type: none"> Conduct formal user training. Design the application to allow end-users to design and produce ad hoc reports. 		<p>◆</p> <p>◆</p>		
9	<p>Insurance validation is sequential and there is no electronic link to GSA Risk Management:</p> <p>a. Approval from GSA Risk Management is sought only after considerable resources have been spent to prepare payment requisition and to obtain needed signatures and support documentation.</p> <p>b. There is no electronic link between GSA Risk Management and Public Works to simplify communications. Invoices are delivered by hand.</p>	<p>Make insurance confirmation a parallel process to begin as soon as a payment request is received by CMO:</p> <ul style="list-style-type: none"> Query GSA Risk Management regarding contractor insurance status once payment requisition arrives from Construction while other processing is being done. This allows added time for communications with contractors who do not have appropriate insurance documentation without causing undue delays. Continue efforts to implement a system that allows PWD and GSA Risk Management to have electronic communication. Ensure that timely information is provided to staff with authority to take corrective action where coverage is inadequate or was terminated. 	<p>◆</p> <p>◆</p> <p>◆</p>			
10	<p>Contract language is weak in some instances and does not adequately address a number of current PWD contract issues. For example:</p> <p>a. It is unclear how to proceed if contractors cancel or do not have the appropriate insurance after the project has started.</p>	<p>Strengthen and clarify contract language to include specific actions when contractor is out of compliance:</p> <ul style="list-style-type: none"> Catalog current problems/issues in contract language and meet with the Office of the County Attorney to help develop appropriate and enforceable contract language. Involve GSA Risk Management in reviewing contract language pertaining to insurance and other issues to assist PWD and the County Attorney in developing appropriate language. 		<p>◆</p> <p>◆</p>		

Public Works Department Construction Payment Process Review
Findings and Recommendations (continued)

	Finding	Recommendation	Short Term	Medium Term	Long Term	Assigned To (For PWD use)
	<p>b. It is not clear what recourse PWD has for the many instances where contractors can be non-compliant.</p> <p>c. Contracts are based on old 'boiler plates' that need to be revised.</p>	<ul style="list-style-type: none"> Provide stronger contract language stipulating consequences of non-compliance. Include if and how work would be stopped, County and contractor responsibilities, who underwrites remedial costs where needed, audit clauses, invoicing processes, etc. 		◆		
11	Inter-divisional communication needs to be improved.	<p>Conduct at least quarterly payment and contract performance review meetings of division chiefs to highlight areas for improvement, correcting root causes and accelerating payments to meet payment target times.</p> <ul style="list-style-type: none"> Use the CSCC system to compute payment times and report on issues impacting payments. Management and key process staff should review performance against established target times contained in A.O. 3-19 and A.O. 3-22 and implement changes as necessary. 	<p>◆</p> <p>◆</p>			
12	Feedback from Construction and CMO to the Contracts and Specifications Division is informal and occurs primarily when there are problems. Consequently, there is limited opportunity for Contracts and Specifications staff to incorporate new information and experiences into contracts.	<ul style="list-style-type: none"> Incorporate feedback mechanisms into quarterly process review meetings (see #11 above). Discuss contract-related problems including particularly those resulting in change orders with other sections/divisions to help staff incorporate changes into future contracts. Encourage staff preparing contracts and design documents to conduct field visits before, during and after construction so they can incorporate new experiences into the contracting process. (Consider allowing the use of County vehicles for these field visits.) 	<p>◆</p> <p>◆</p> <p>◆</p>			
13	It is not apparent that standard written procedures exist for periodically updating contract documents and contracts still in draft to incorporate lessons learned, changes in standards and new regulations.	<p>Develop procedures and encourage staff to periodically review contract documents, incorporate changes in law, regulations and industry standards:</p> <ul style="list-style-type: none"> Review change orders and addenda of completed/ongoing contracts to ensure similar problems do not keep occurring. Review county, state and federal regulations, and industry standards on an ongoing basis and update procedures and contract documents accordingly without overly relying on division chief. <p>While all contracts are not similar, there may be gains to be realized by standardizing some contract language and "bid book" formats:</p>	<p>◆</p> <p>◆</p>	◆		

Public Works Department Construction Payment Process Review
Findings and Recommendations (continued)

	Finding	Recommendation	Short Term	Medium Term	Long Term	Assigned To (For PWD use)
		<ul style="list-style-type: none"> Update contract and specifications boilerplates at least annually to incorporate new data and procedures and ensure only the latest versions are available to staff to ensure the incorrect versions are not issued. Consider standardized formats for contracts and bid books. For example, use “Intentionally Left Blank” designations for sections not required for a specific contract and standardize the use of color-coded pages for bid book sections. Develop specialized training and standard operating procedures for preparing contracts and bid documents. 		<p>◆</p> <p>◆</p> <p>◆</p>		
14	<p>While not unique to PWD, engineers who also function as Construction Managers tend to concentrate primarily on the technical aspects of the job at the expense of effective administrative oversight.</p> <p>Note: While a detailed analysis of workload was not completed, it was reported that the number of projects for each Construction Manager may be too high.</p>	<ul style="list-style-type: none"> Train and require Construction Managers to manage both the technical and clerical/administrative duties that are inherent in effective project management. Establish formal procedures for Construction Managers to log relevant data to support project review and the payment process. These include meetings with contractors, payment requisition review meetings, detailed logs of “additional” work, payments, and change orders. Evaluate workload distribution and efficiently allocate contracts among construction managers. Provide the requisite training where needed to improve personnel effectiveness. 	◆	<p>◆</p> <p>◆</p>		
15	Staff feels that the previous use of a generic code instead of specifying individual contingency line items is preferable.	Continue listing contingency line items for control purposes, and where such line items are used frequently, ensure that they become bid items in future contracts.	◆			
16	Some contractors’ internal payroll periods do not always match a project’s billing period.	Make efforts to align billing periods with the contractor’s payroll schedule.	◆			
17	Insufficient workspace.	<p>Continue to improve CMO workspace:</p> <ul style="list-style-type: none"> Archive files to obtain room for enhanced workspace. Work with GSA to design new working space for CMO staff. Provide front desk receptionist to announce visits from contractors to minimize interruptions. 		<p>◆</p> <p>◆</p> <p>◆</p>		
18	CMO staff performs substantial rework on initial change order drafts submitted	Improve quality of initial change order drafts prepared by Construction Managers:				

Public Works Department Construction Payment Process Review Findings and Recommendations (continued)

	Finding	Recommendation	Short Term	Medium Term	Long Term	Assigned To (For PWD use)
	<p>by Construction Managers. CMO:</p> <p>a. Writes and revises justification language and cover memo.</p> <p>b. Corrects errors in materials submitted by Construction Managers.</p> <p>c. Tracks and expedites change orders through approval process including retroactive change orders. Retroactive change orders are common</p>	<ul style="list-style-type: none"> Provide training on preparing draft change orders for Construction Division staff members. Develop written standard operating procedures. <p>PWD should become more proactive in recognizing the need for change orders and acting accordingly:</p> <ul style="list-style-type: none"> Alert all relevant personnel (using CSCC computer generated flags) that project funding, time limits or other factors warrant a change order and ensure action is taken proactively. 	<p>◆</p> <p>◆</p>	<p>◆</p>		
19	<p>Large number of signatures (11) and up to four additional sets of staff initials are required to approve a change order.</p> <ul style="list-style-type: none"> Change order may be reviewed by five Department of Business Development (DBD) section heads before the DBD Director's approval The County Attorney and the Office of Management and Budget also review change orders. Where other county departments provide funding, these departments also performed change order and funding reviews. 	<ul style="list-style-type: none"> Re-evaluate the need for each signature in the Construction Division and eliminate signatures where possible. Discuss methods of expediting reviews in the DBD and reducing the number of DBD signatures required. Consider using electronic versions of change orders to facilitate concurrent review by the County Attorney, OMB and DBD. Ensure only staff with adequate knowledge of project funding sources and funds availability review change orders. 	<p>◆</p> <p>◆</p> <p>◆</p>	<p>◆</p>		

Key: Short Term - Within 90 Days: Medium Term- Within 180 Days: Long Term: Greater than 180 days

APPENDIX II
Miami-Dade Public Works Department
Construction Contract Payment Process
CSCC System Functionality and User Perception Analysis (Partial)

The grid indicates the business tools currently used by staff for selected contract monitoring and payment functions. The list is not exhaustive but is intended to highlight the following.

1. There are areas where the CSCC system does not have the functionality that a user needs for day-to-day contract monitoring.
2. There are instances where staff is unaware that CSCC system capability exists for a particular function and therefore use other business tools to achieve the same results.
3. There are instances where staff aware that the CSCC system capability exists, however, staff do not effectively utilize the functionality.

Construction Contract Payment Process Activity	Business Tools Used				CSCC System Functionality	
	Manual Process	Hand written Log	CSCC System	Excel Spreadsheet	User Perception of System Capability¹	Current System Capability²
Preparation of Payment Estimate						
CMO prints the form for preparing payment estimate and distribute to Construction Managers			⊙		Yes	⊙
Do Construction Managers access the CSCC system, print own forms, enter project data, see project flags, view payment status					No	⊙

¹ User perception based on CSCC user interviews in the Contract Monitoring Office (CMO), Contracts and Specifications Section, and Finance Division.

² Current capability without new programming based on input from Public Works Computer Division.

Construction Contract Payment Process Activity	Business Tools Used				CSCC System Functionality	
	Manual Process	Hand written Log	CSCC System	Excel Spreadsheet	User Perception of System Capability ¹	Current System Capability ²
Consultant Invoices (payable for construction inspections etc.) are generally submitted by mail. Clerk 3 retrieves consultant invoice and sorts according to project type (QNIP, non-QNIP, FEMA), then forwards invoices to Clerk 4	⊙				N/A	
Consultant Payment Request Log updated to reflect the new invoices received	⊙			⊙	No	
Clerk 4 places invoice in sorting bin according to type (QNIP, non-QNIP, FEMA).					No	
Construction Manager, working with contractor, “redlines” the payment estimate	⊙				No	
Construction Division hand-delivers construction payment estimate to the CMO. Receipt of redline is logged at CMO	⊙	⊙		⊙	No	⊙
Draft/consultant invoices are forwarded to Clerk 4. Clerk 4 distributes and makes entries into manual and Excel tracking logs. (Consulting invoice information is not recorded in manual logs)	⊙	⊙		⊙		
If the payment estimate is the first payment requisition for a new work order, CMO enters work order information on CSCC.			⊙		Yes	⊙
Does the CSCC prompt user for fist/last payment?					No	
Initial Review and Entry of Draft Payment Requisition/Consultant Invoice						
Clerk 3 checks all attached documents for accuracy and appropriateness	⊙				N/A	
Clerk 3 logs the results of this activity		⊙		⊙	No	
Accounting Clerk retrieves consultant invoice from sorting bin, checks attached documents such as timesheets, employee ID, hours etc.	⊙				N/A	
Accounting Clerk checks for work order number, reviews calculations, amount payable and remaining contract balance and logs results				⊙	No	

Key: N/A – Not Applicable

Construction Contract Payment Process Activity	Business Tools Used				CSCC System Functionality	
	Manual Process	Hand written Log	CSCC System	Excel Spreadsheet	User Perception of System Capability ¹	Current System Capability ²
Clerk 3 checks contract amount, previous payment amounts, Notice to Proceed dates, billing period, Construction Manager's signature, project diary, amount payable, contingency amount, Inspector General (999-2) fees, budget code and payroll data	⊙				No	⊙
Clerk 3 logs result and date.				⊙	No	
If the current payment requisition is the first for the contract, the Clerk 3 checks, contract award budgeted amount, ensures there are three copies each of the contract, a Notice to Proceed Letter and a Recommendation Letter	⊙				N/A	
These activities and the results are logged				⊙	No	
If the current payment requisition represents the last payment on the contract, the Clerk 3 checks that there is a Company Seal, Certificate of Acceptance, 3 copies of the Final Releases of Liens, Original Final Releases from sub-contractors or Consent of Surety, Total Work to Date Under or Overrun. If there is an overrun, the Clerk verifies and attaches copy of the work order log and the change order	⊙				N/A	
These actions are logged	⊙			⊙	No	
Clerk 4 retrieves consultant invoice package from Clerk 3, prepares summary totals and completes an invoice list sheet	⊙			⊙	No	⊙
Clerk 4 reviews and records consultant invoice amounts by project type (FEMA, QNIP, non-QNIP)	⊙			⊙	No	⊙
Clerk 4 prepares transmittal memo to General Services Administration, Risk Management Division	⊙			⊙	No	
Clerk 3 matches the current consultant requisition against prior requisitions approved by Miami-Dade County Finance Department	⊙			⊙		⊙
Clerk 3 prints initial payment documents, including Excel payment summary sheet and records the print date	⊙			⊙	No	⊙
Clerk 3 creates an entry in invoice/work order tracking log and forwards to CMO Supervisor for a review.				⊙		
CMO Supervisor forwards the draft payment requisition to a Data Entry Specialist for entry into CSCC and records the date the package was sent to the Data Entry Specialist	⊙	⊙		⊙	No	

Key: N/A – Not Applicable

Construction Contract Payment Process Activity	Business Tools Used				CSCC System Functionality	
	Manual Process	Hand written Log	CSCC System	Excel Spreadsheet	User Perception of System Capability ¹	Current System Capability ²
Data Entry Specialist 2 creates payment requisition and prints backup copy to be used as draft for next pay requisition			⊙	⊙	Yes	⊙
CMO verifies that the adding machine tape matches total work to date	⊙			⊙	No	
CMO prints final version of payment requisition for signatures		⊙	⊙	⊙	Yes	⊙
Data Entry Specialist obtains Contractor signature. Additionally, CMO logs all contacts with contractor into a call sheet (time, date, etc.)	⊙	⊙		⊙	No	
Clerk 3 records pay requisition information in “Black Binder”	⊙				No	⊙
Exhibit C						
CMO Supervisor performs final review of invoices and all supporting documents. Reviews include, work order numbers, budget codes, payment amounts, and pertinent comments	⊙			⊙	No	
CMO Supervisor prepares and attaches Exhibit C, verifies that that adding machine tape matches total work to date and updates the logs	⊙			⊙	No	
Clerk 4 enters CMO Supervisor signature date into Excel log		⊙		⊙		
Reviews, Approvals and Signatures						
Data Entry Specialist 2 calls Construction Manager for signature and updates log	⊙	⊙		⊙	No	
Clerk 3/Data Entry Specialist 2 hand carries payment requisition/consultant invoice to Risk Management for insurance verification and updates log	⊙	⊙		⊙	No	
Risk Management verifies insurance and signs approval.	⊙				No	
Clerk 3/Data Entry Specialist 2 retrieves packet from Risk Management and updates log	⊙	⊙		⊙	No	
Clerk 3/Data Entry Specialist 2 hand carries payment requisition/consultant invoice to the Chief of Construction for signature.	⊙				N/A	
Updates log		⊙		⊙	No	
Packages returned to Clerk 4 and logs updated	⊙	⊙		⊙	No	

Key: N/A – Not Applicable

Construction Contract Payment Process Activity	Business Tools Used				CSCC System Functionality	
	Manual Process	Hand written Log	CSCC System	Excel Spreadsheet	User Perception of System Capability ¹	Current System Capability ²
Construction Payment requisitions are forwarded to CMO Division Chief (CMO Supervisor reviews consultant invoices)	⊙			⊙		
CMO Supervisor forwards invoice to Clerk 3 for delivery to Contract Inspection and Consultant Section in Construction Division	⊙					
Public Works Finance						
Construction forwards consultant invoice to Public Works Finance for approval	⊙			⊙		
Clerk 3/Data Entry Specialist 2 hand carries requisition from Chief of Construction to Public Works Finance Department for approval and signature	⊙	⊙		⊙		
Public Works Finance checks attachments, re-enters invoice data into Finance database, reviews calculations and budget codes and signs approval					No	⊙
Clerk 3/Data Entry Specialist 2 retrieves payment requisition from Public Works Finance and updates logs		⊙		⊙		
CMO Chief receives consultant invoices from PWD Finance and in turn forwards invoices to the Clerk 4				⊙		
Public Works Department Director's Signature						
PWD Director signs the first and last payment requisitions/consultant invoices each contract. Otherwise the Assistant Director initials the payment requisition	⊙				No	
CMO prepares transmittal memo to the County's Finance Department, attaches the payment package for delivery to the Finance Department	⊙					
Miami-Dade County Finance Department						
Clerk 3/Data Entry Specialist 2 hand carries the payment to the Finance Department and updates log	⊙	⊙		⊙	No	
Finance Department issues payment and posts action on FAMIS						
PWD verifies that payments were made. (There is no feedback to Public Works from finance)	⊙					
Miscellaneous Features and Functionality						

Key: N/A – Not Applicable

Construction Contract Payment Process Activity	Business Tools Used				CSCC System Functionality	
	Manual Process	Hand written Log	CSCC System	Excel Spreadsheet	User Perception of System Capability ¹	Current System Capability ²
Track payment requisitions that have to be re-processed because of errors are noted on the Excel log				⊙	No	
Date corrected payment requisitions were sent to Public Works Finance				⊙	No	
Log – Indicate that CMO returns estimates to Constructions for various reasons				⊙	No	
Logs track “Stop Payment-DBD” for requisitions being held for non-compliance with a DBD requirement.				⊙	No	
Color codes are used to indicate reasons why a payment requisition is being held: Red – Pending additional information before payment can be sent to the Miami-Dade County Finance Department; Lilac – Payment requisition is being held by the Chief of Construction (various reasons); Pink – Payment requisition is being held because of an insurance-related issue				⊙	No	
Excel log also indicates payment requisitions that are held by Construction Manager				⊙	No	
Additional Activities and Information Requirements						
Contracts and Specifications/Job Initiation						
Where and when did work originate (user department, Board of County Commissioner s or CICC etc.)	⊙				No	
Updated information verified by Public Works Finance indicating funding availability before work orders are issued and contracts/bid documents				⊙	No	
Approval of Request to Advertise and Award Recommendation	⊙				No	⊙
Engineers enter prices offered by winning bidder into CSCC system			⊙		Yes	⊙
Change Orders						
Generate system flags for CMO and Construction Division that may require change orders to be initiated	⊙		⊙		Yes	⊙
Input and track requests for a change orders				⊙	No	⊙
Construction Manager and CMO jointly prepare draft change order language and backup documentation	⊙			⊙	No	
CMO requests contractor to sign draft change order and updates the log	⊙					

Key: N/A – Not Applicable

Construction Contract Payment Process Activity	Business Tools Used				CSCC System Functionality	
	Manual Process	Hand written Log	CSCC System	Excel Spreadsheet	User Perception of System Capability¹	Current System Capability²
CMO staff prepares the “red folder” which includes six copies of change order for approval, and updates the log	⊙			⊙	No	
Track progress and sequential review of draft change order (PWD, CICC, Assistant County Attorney, OMB, DBD and the Assistant County Manager)	⊙			⊙	No	
Other Payment Process Needs						
Track the total time to complete payment reviews	⊙				No	⊙
Track total amounts paid and outstanding on contract				⊙	No	⊙
Minimize number of screens to navigate						⊙
Incorporate all Public Works Finance functionality	⊙			⊙	No	
Use system to identify projects by funding source (i.e. QNIP, non-QNIP, FEMA)				⊙	No	⊙
Generate flags concerning expenditure against budget, time on contract, insurance changes, change orders, use of contingency funds, holds, identify CSBE and DBE vendors, etc. CSCC already performs some functions			⊙	⊙	Yes and No	Partial ⊙